

FIG. 1

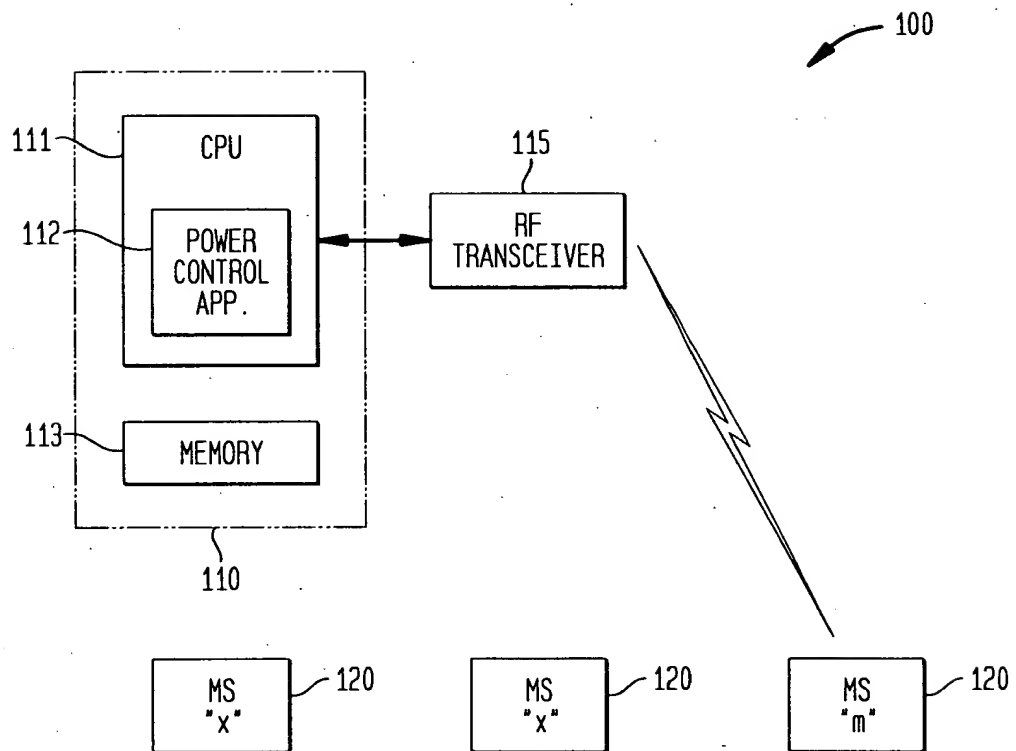


FIG. 2

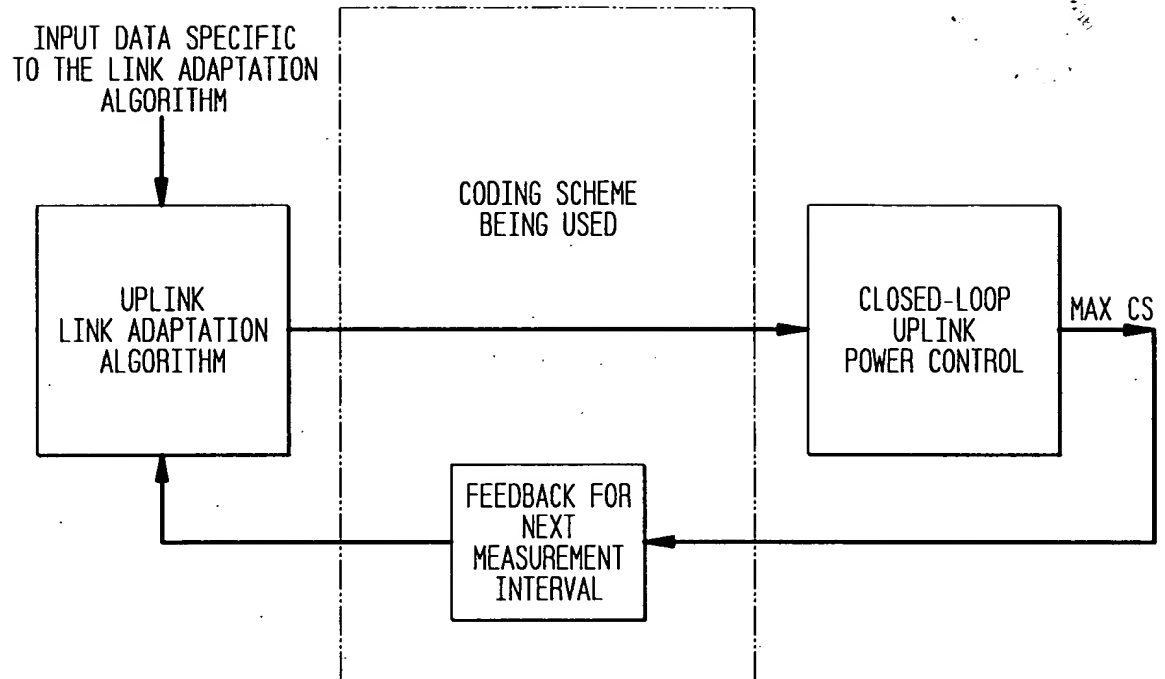


FIG. 3

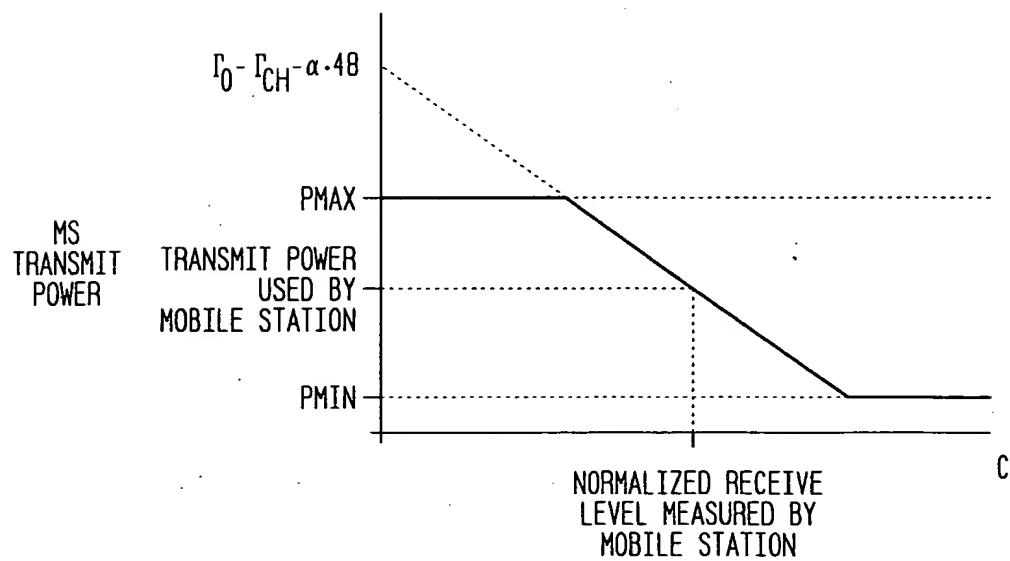


FIG. 4

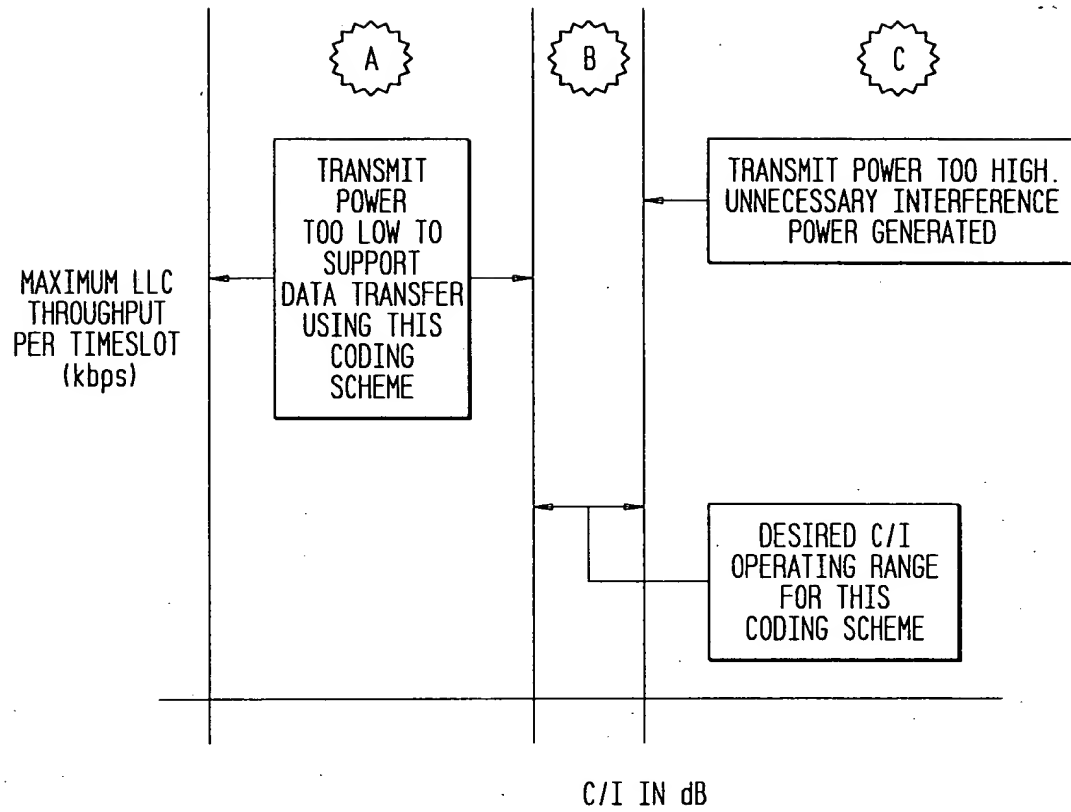


FIG. 5

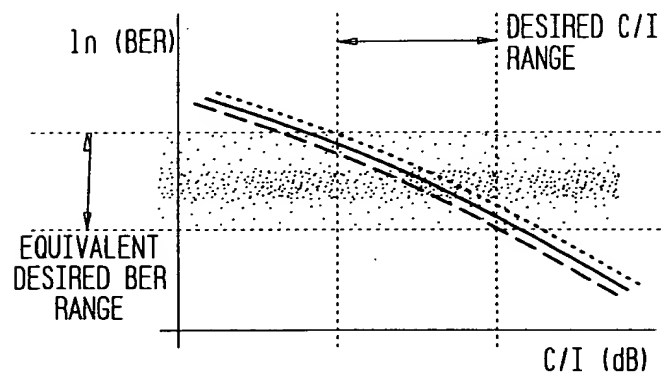


FIG. 6

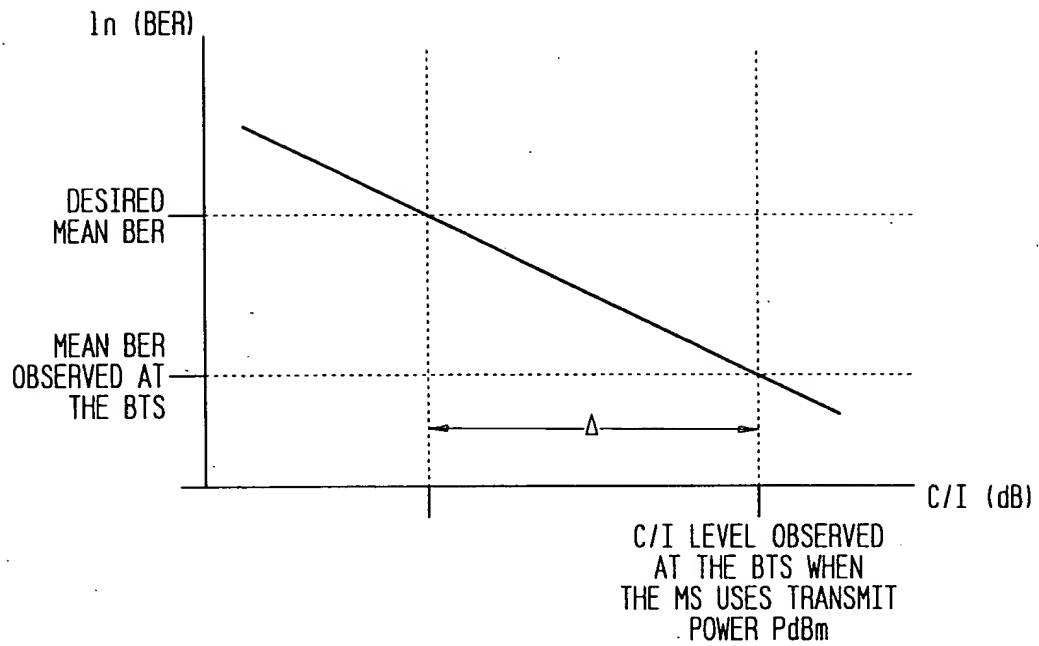


FIG. 7

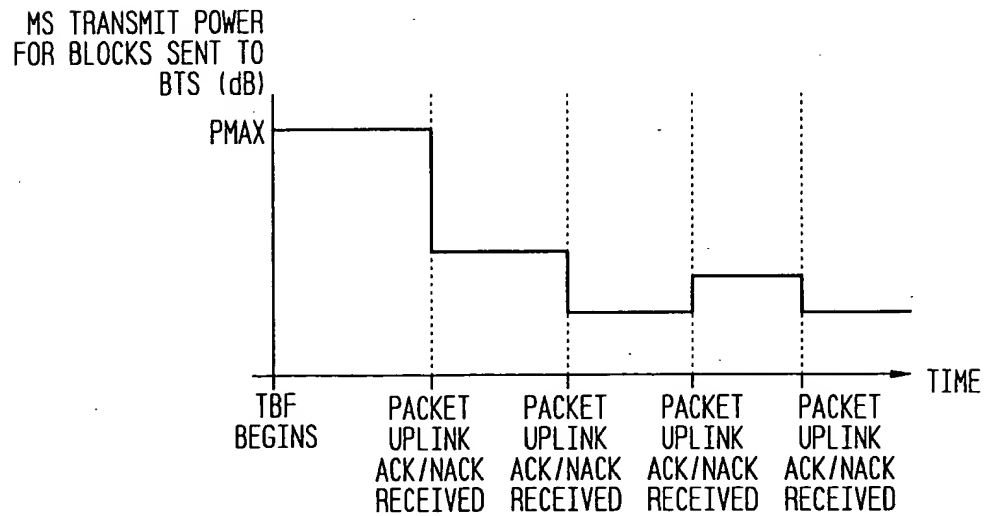
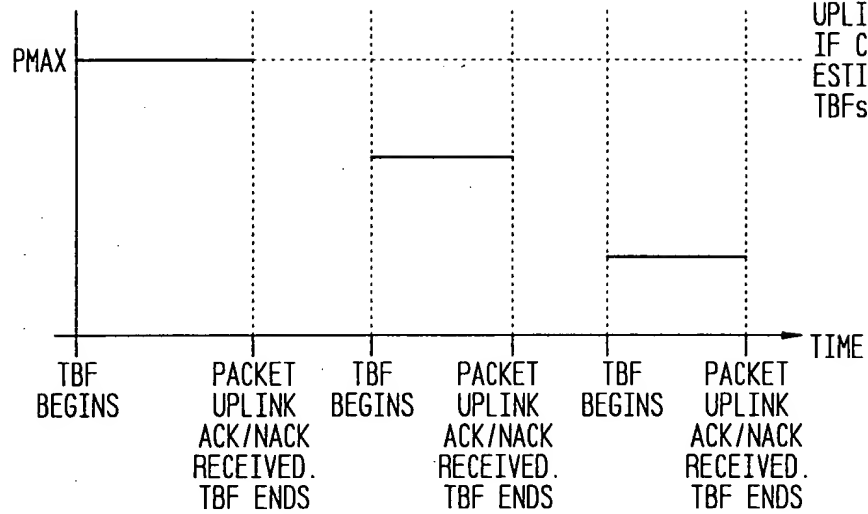


FIG. 8

MS TRANSMIT POWER  
FOR BLOCKS SENT TO  
BTS (dB)



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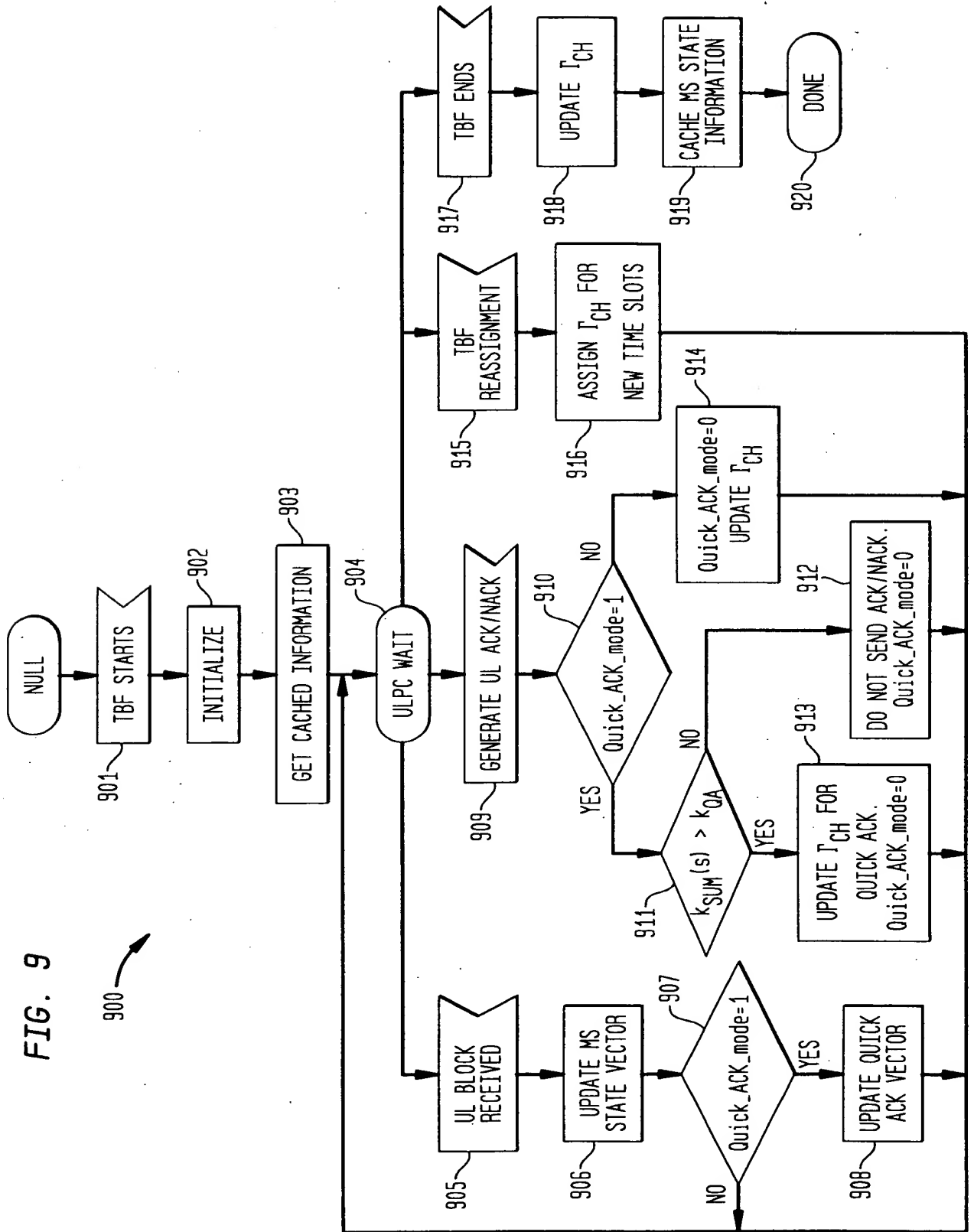


FIG. 10A

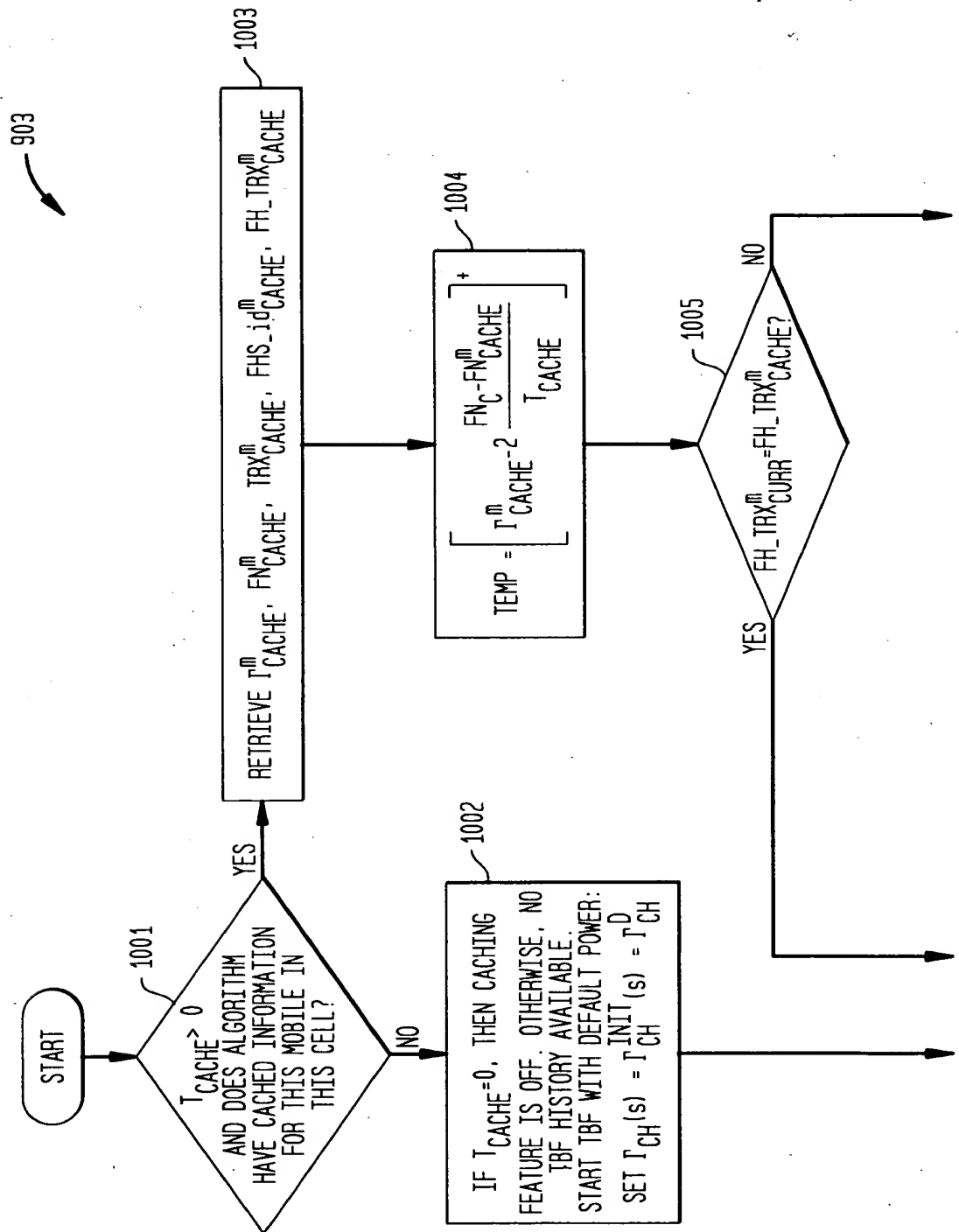


FIG. 10B

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graph TD
    Entry(( )) --> 1006{FH_TRX_CURR^m = 1?}
    1006 -- YES --> 1009[IM = Interference_margin_FH]
    1006 -- NO --> 1008[IM = Interference_margin]
    1009 --> 1012
    1008 --> 1012
    1012 --> 1007{FH_TRX_CURR^m = 1?}
    1007 -- YES --> 1011{FHS_id_CURR^m = FHS_id_CACHE?}
    1007 -- NO --> 1010{TRX_CURR^m = TRX_CACHE?}
    1011 -- YES --> IM0[IM = 0]
    1011 -- NO --> IM_FH[IM = Interference_margin_FH]
    1010 -- YES --> IM_TRX[IM = Interference_margin]
    1010 -- NO --> IM_FH
    IM0 --> 1012
    IM_FH --> 1012
    IM_TRX --> 1012
    1012 --> SET[SET Γ_CH(s) = Γ_CH^INIT(s) = { MAX(Γ_CH^D, TEMP - IM), IF Γ_CACHE^m(s) ≥ Γ_CH^m OTHERWISE. Γ_CACHE^m } ]
```

Flowchart 1000 illustrates the logic for setting the interference margin (IM) based on current transmission parameters and cache status.

The flowchart starts with a decision diamond 1006:  $FH\_TRX\_CURR^m = 1?$

- If YES, it proceeds to block 1009:  $IM = \text{Interference\_margin\_FH}$ .
- If NO, it proceeds to block 1008:  $IM = \text{Interference\_margin}$ .

Both paths lead to a junction point before decision diamond 1007:  $FH\_TRX\_CURR^m = 1?$

- If YES, it proceeds to decision diamond 1011:  $FHS\_id\_CURR^m = FHS\_id\_CACHE?$ 
  - If YES, it proceeds to block  $IM = 0$ .
  - If NO, it proceeds to block  $IM = \text{Interference\_margin\_FH}$ .
- If NO, it proceeds to decision diamond 1010:  $TRX\_CURR^m = TRX\_CACHE?$ 
  - If YES, it proceeds to block  $IM = \text{Interference\_margin}$ .
  - If NO, it proceeds to block  $IM = \text{Interference\_margin\_FH}$ .

All paths lead to a junction point before block 1012:

1012:  $SET \Gamma_{CH}(s) = \Gamma_{CH}^{INIT}(s) = \begin{cases} \text{MAX}(\Gamma_{CH}^D, \text{TEMP} - IM), & \text{IF } \Gamma_{CACHE}^m(s) \geq \Gamma_{CH}^m \\ \Gamma_{CACHE}^m & \text{OTHERWISE.} \end{cases}$

The flowchart ends with a terminal block labeled DONE.

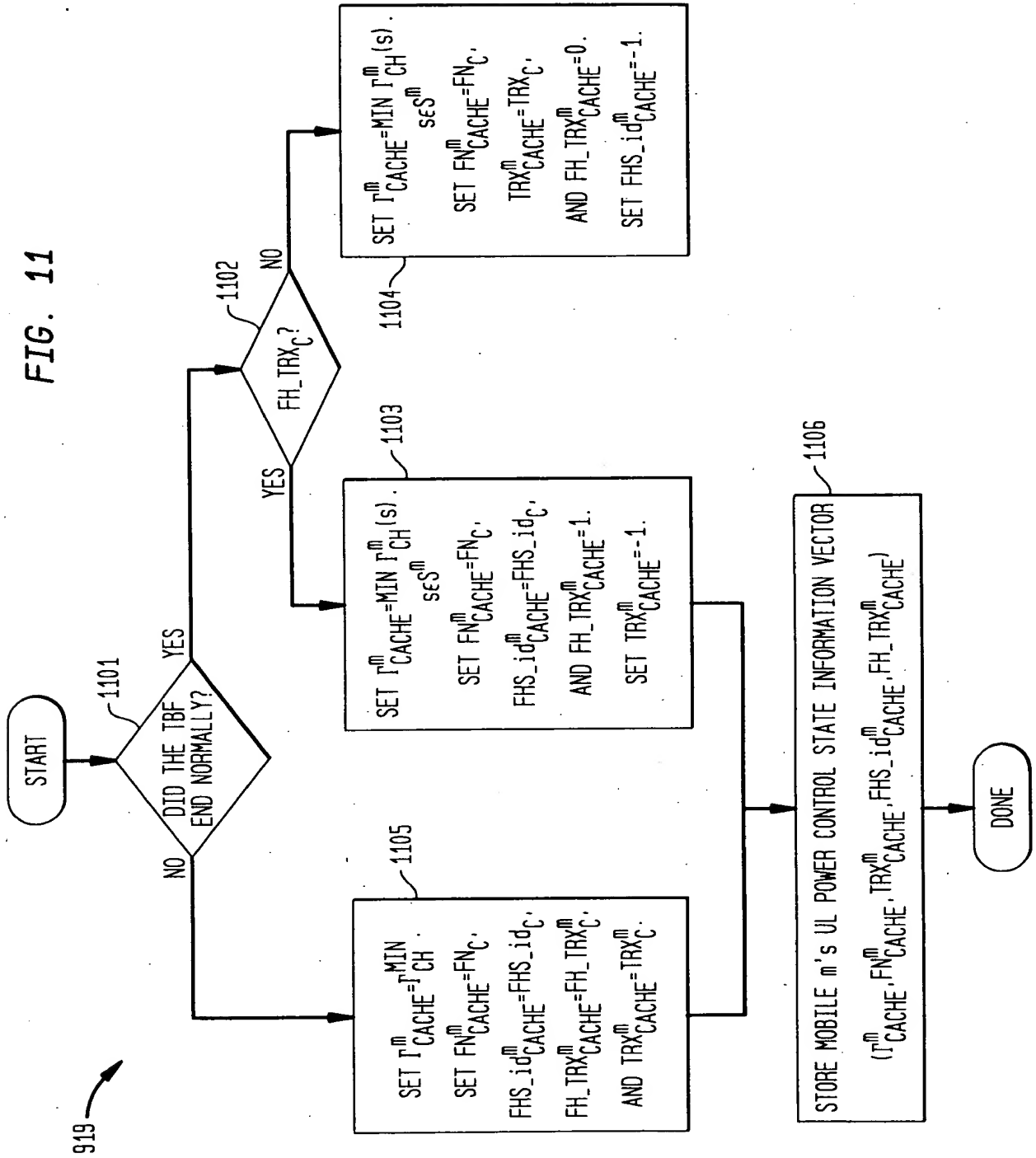
$$\text{SET } \Gamma_{\text{CH}}(s) = \Gamma_{\text{CH}}^{\text{INIT}}(s) = \begin{cases} \text{MAX}(\Gamma_{\text{CH}}^{\text{D}}, \text{TEMP-IM}), & \text{IF } \Gamma_{\text{CACHE}}^{\text{m}}(s) \geq \Gamma_{\text{CH}}^{\text{D}} \\ \Gamma_{\text{CACHE}}^{\text{m}}, & \text{OTHERWISE.} \end{cases}$$

DONE



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FIG. 11



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FIG. 12

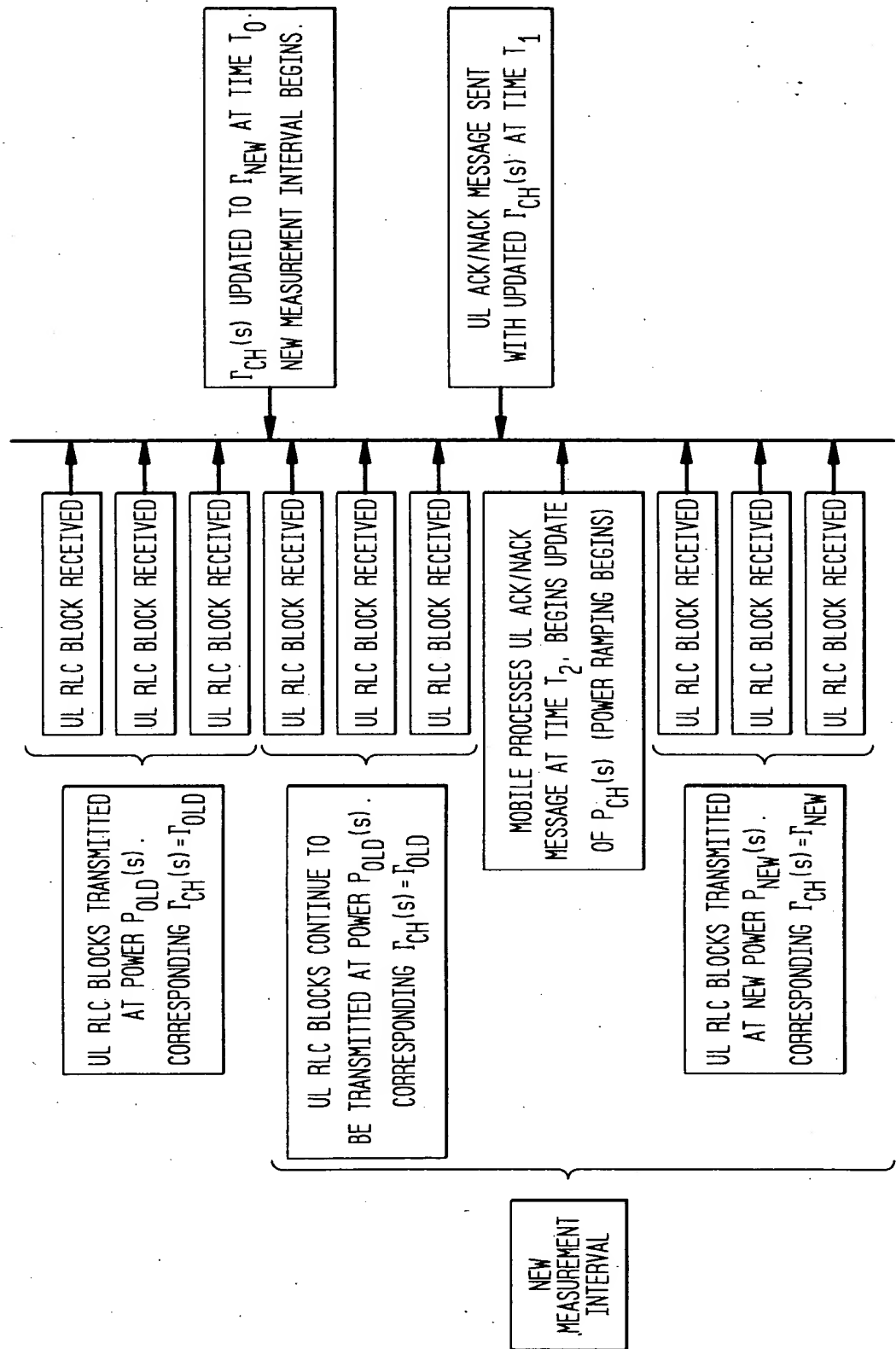
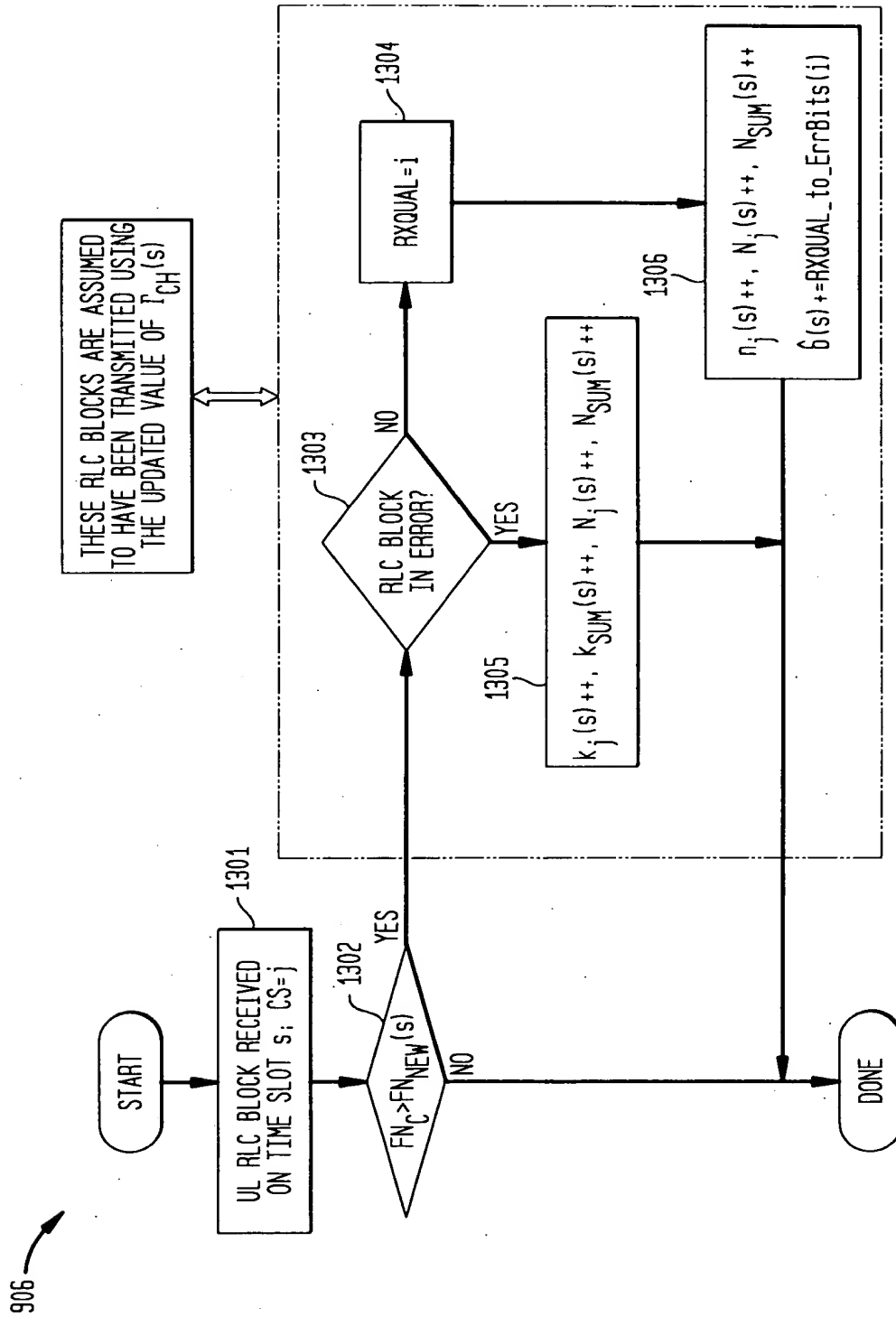


FIG. 13



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FIG. 14

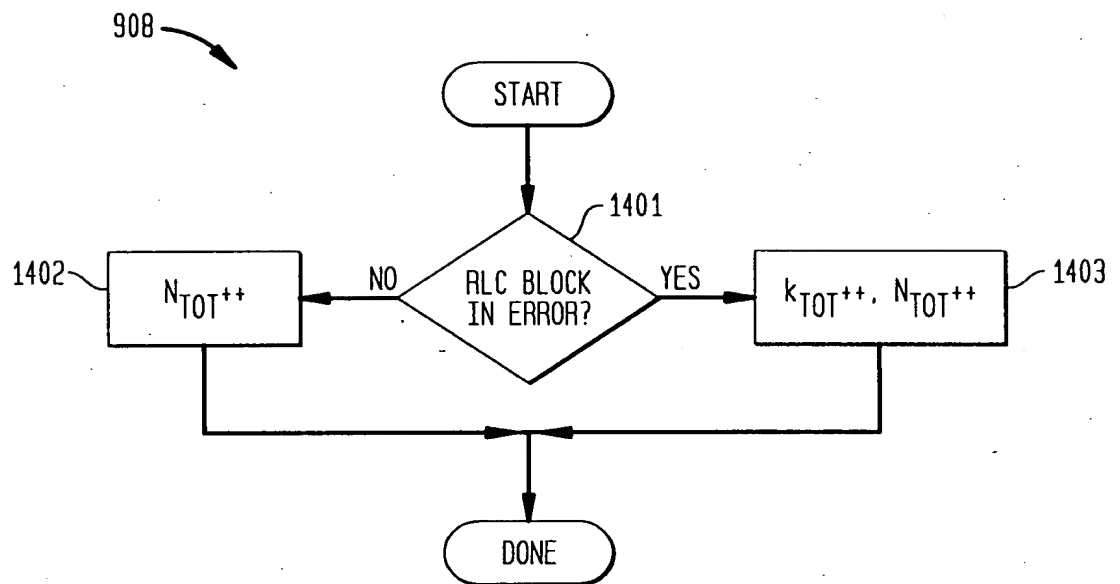
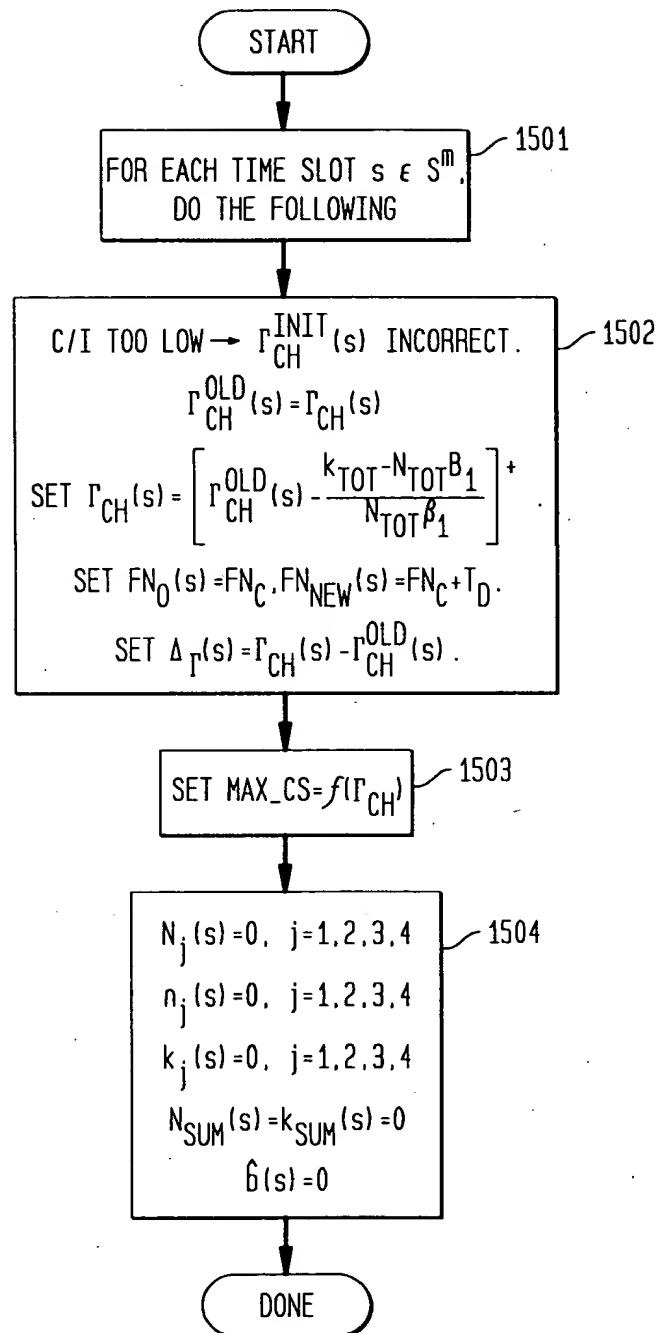


FIG. 15

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FIG. 16

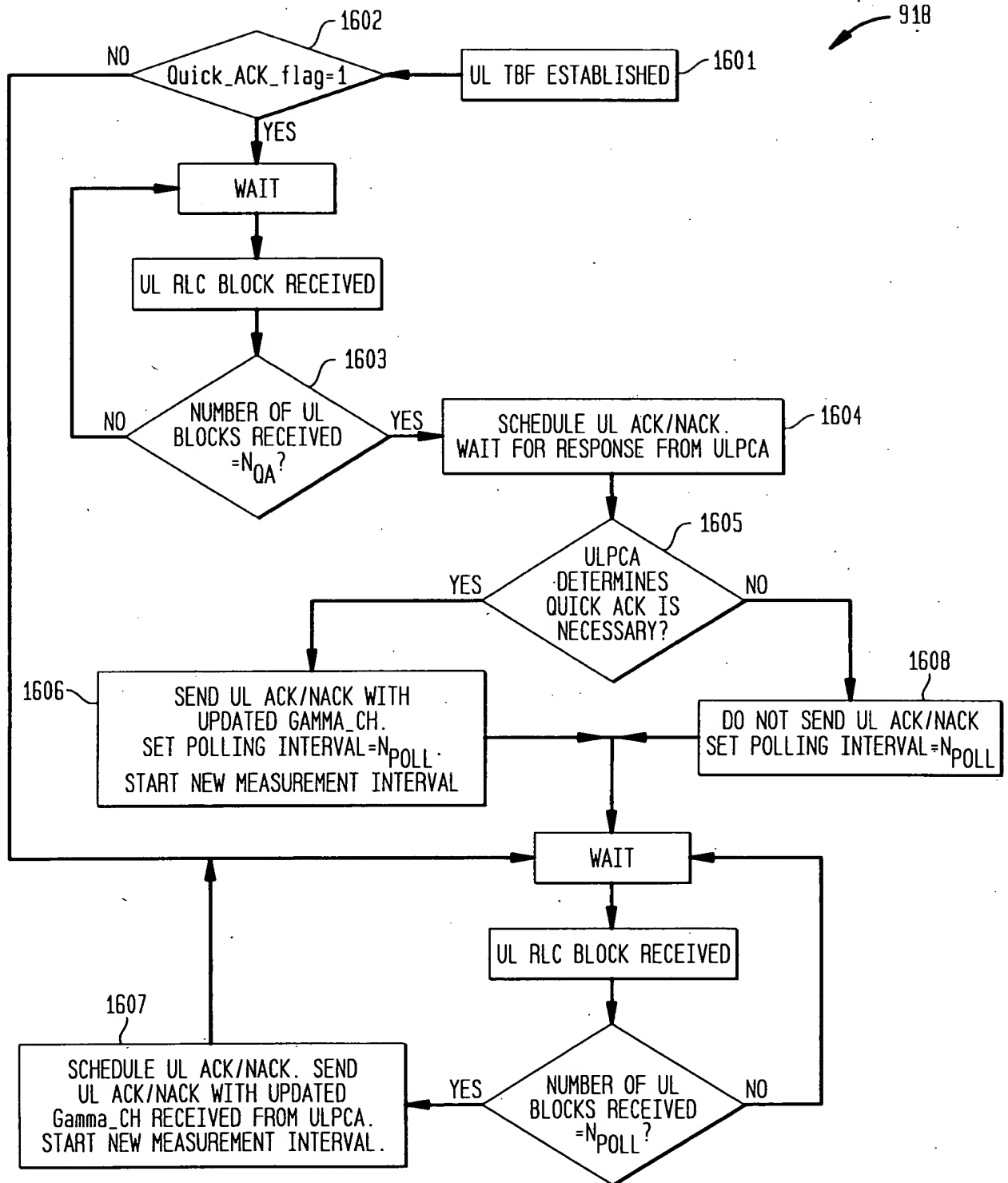


FIG. 17A

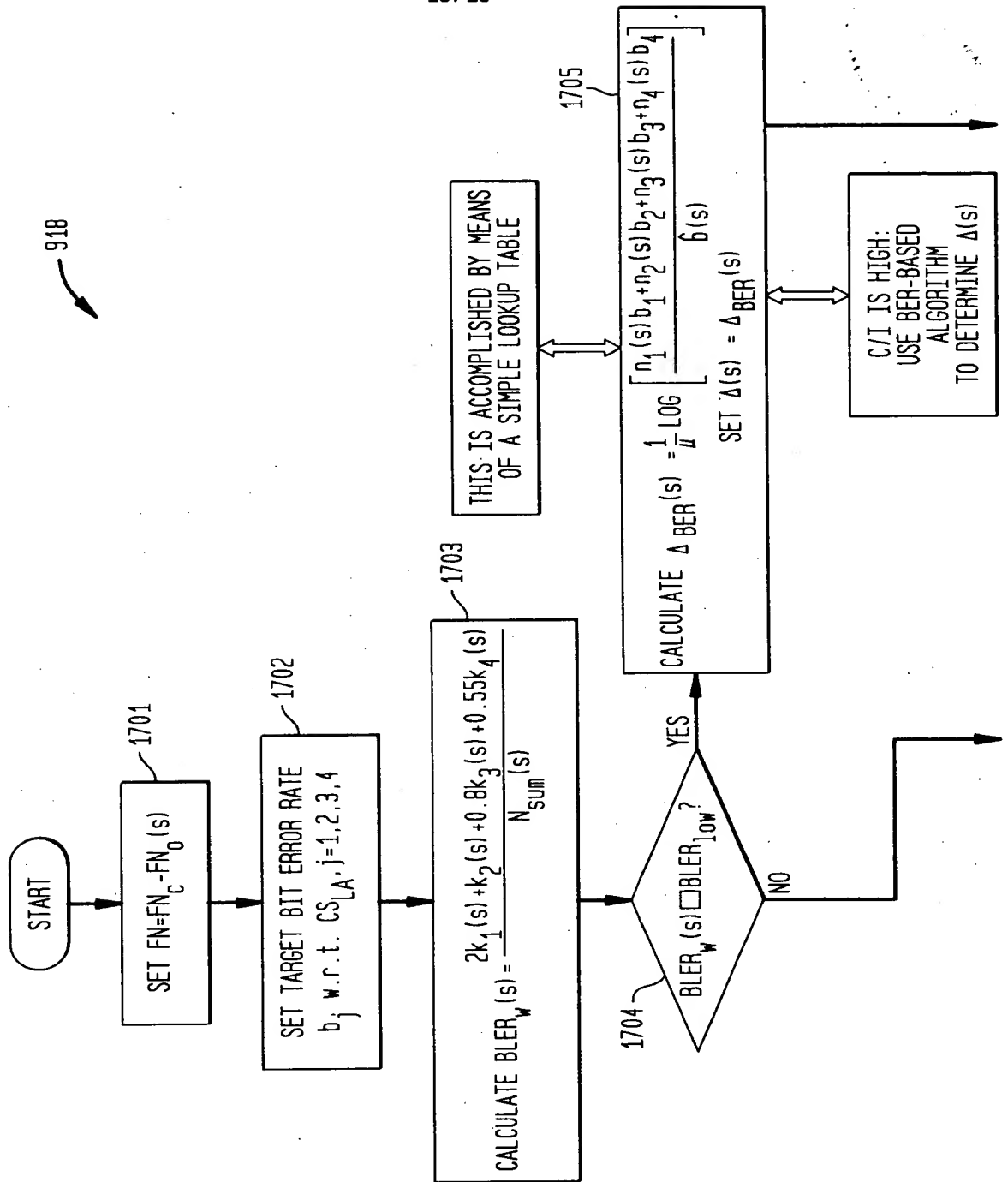


FIG. 17B

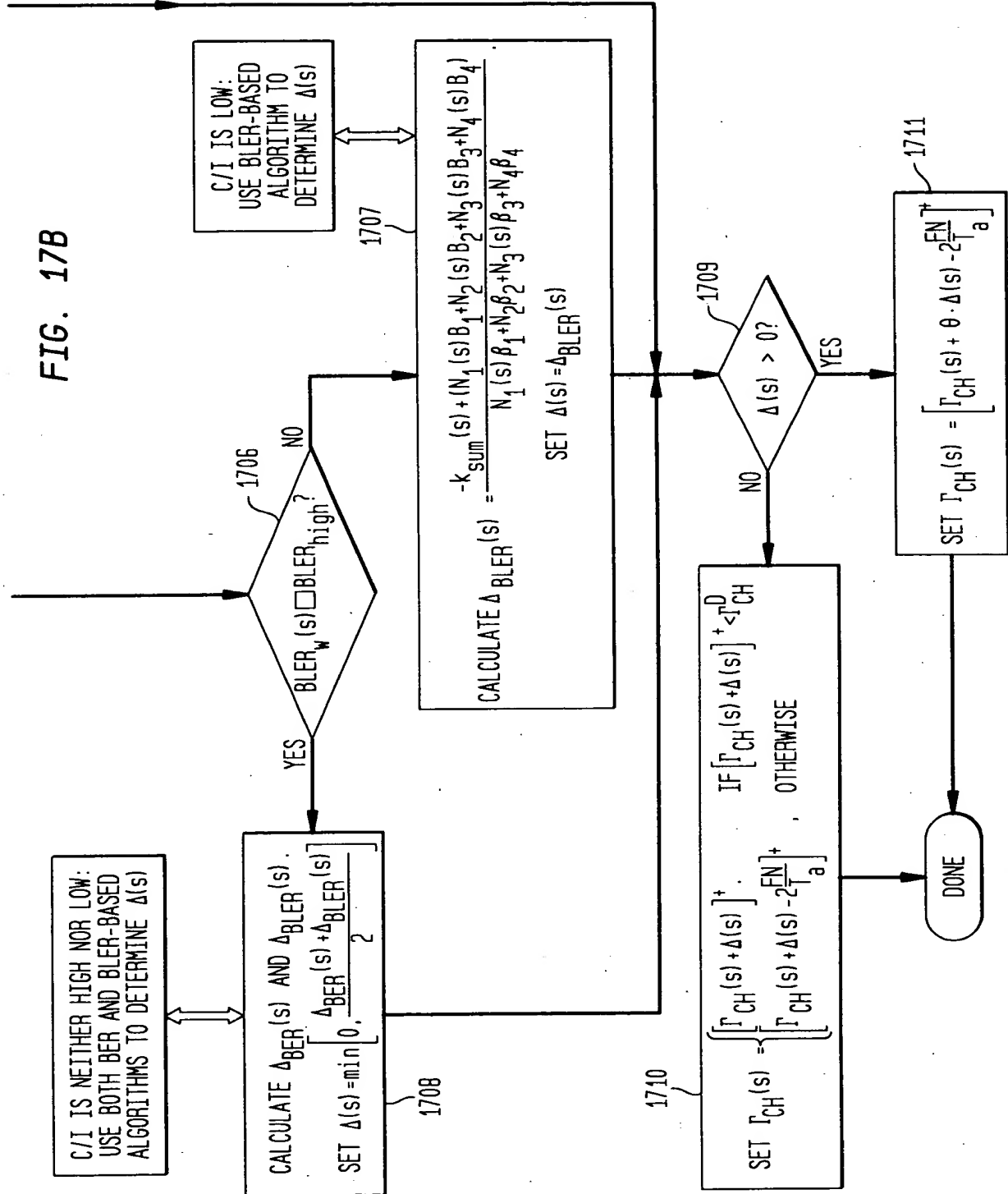




FIG. 18

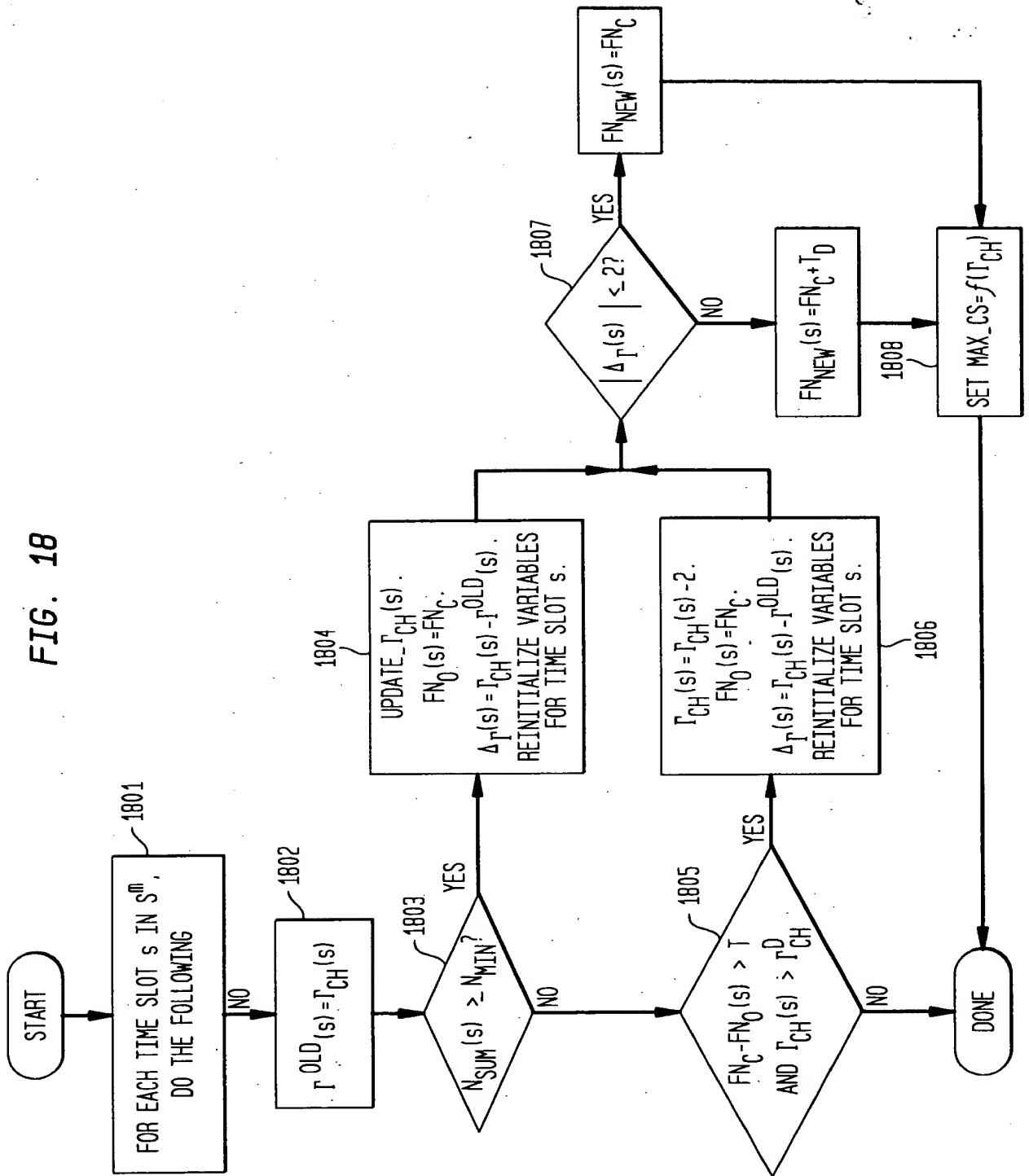


FIG. 19

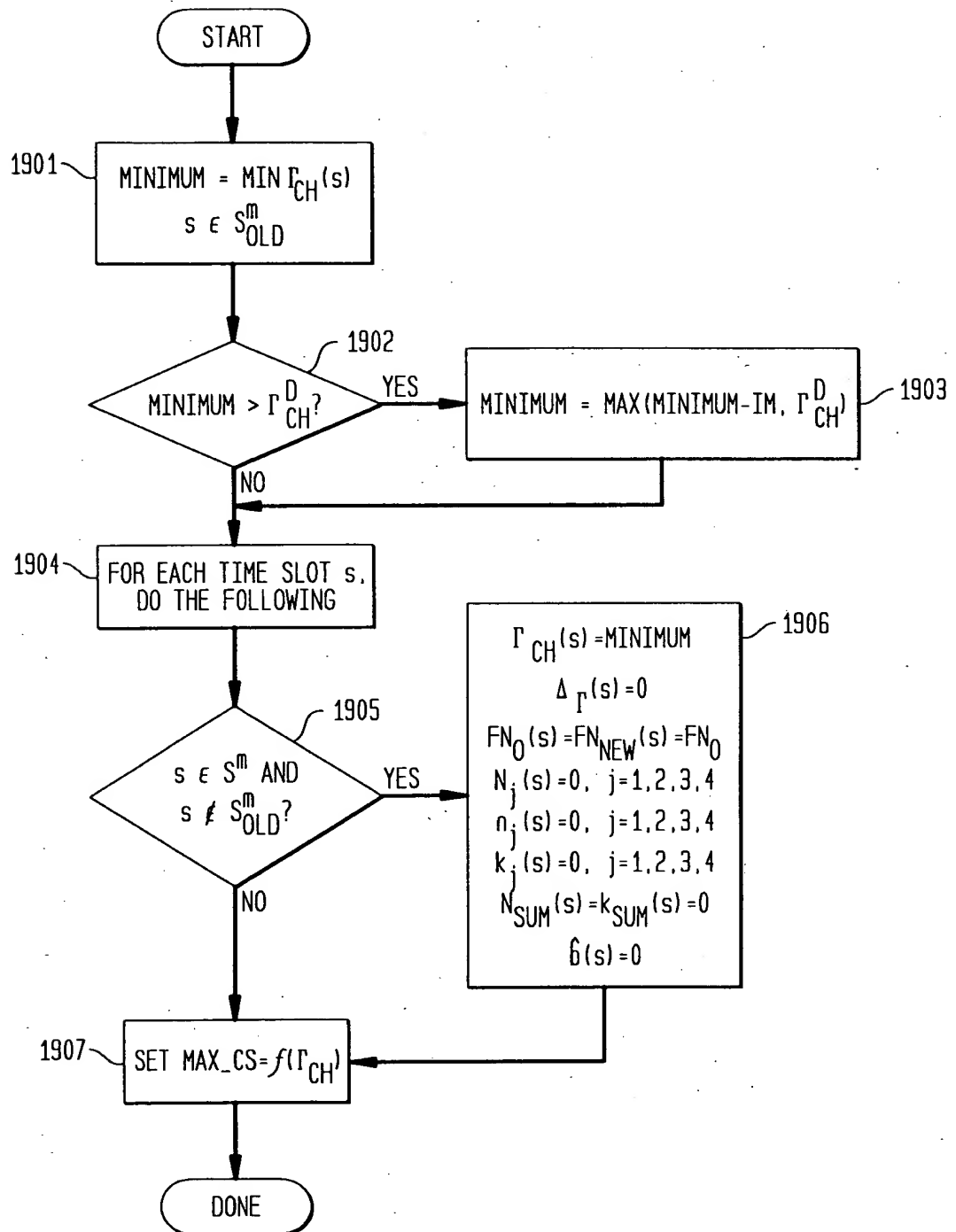


FIG. 20

